REMARKS/ARGUMENTS

Reconsideration of the present application, as amended, is respectfully requested.

The June 22, 2005 Office Action and the Examiner's comments have been carefully considered. In response, claims are amended, and remarks are set forth below in a sincere effort to place the present application in form for allowance. The amendments are supported by the application as originally filed. Therefore, no new matter is added.

CLAIM AMENDMENT

Claim 3 is amended to eliminate an improper multiple dependent claim dependency. Specifically, prior to amendment multiple dependent claim 5 was dependent upon multiple dependent claim 3 in violation of 37 CFR 1.75. Therefore, claim 3 is amended to eliminate the multiple claim dependency such that claim 5, which is a multiple dependent claim, is not dependent on any multiple dependent claims.

REJECTION UNDER 35 USC §101

In the Office Action, claims 1-8, 10, 12, 19 and 20 are rejected under 35 USC 101 because the Examiner contends that the

claimed invention is directed to non-statutory subject matter. In response, claims 1, 10, 12, 19 and 20 are amended to be directed to a technological art, environment or machine which results in a practical application producing a concrete, useful and tangible result.

Specifically, claim 1 is amended to be directed to a method of coding a multi-media object using an encoder which is receivable of the multi-media object from an input unit or object generation unit and generates a bit-stream which is subsequently reproducable by a reproduction unit or decoder to obtain the multi-media object.

Claim 10 is amended to be directed to a method of transmitting at least one multi-media object using a transmitter which generates and transmits a bit-stream which is subsequently reproducable by a reproduction unit or decoder to obtain the multi-media object.

Claim 12 is amended to be directed to a method of receiving at least one bit-stream representing a multi-media object in which bit-stream quality information has been added and enabling the multi-media object to be reproduced by a reproduction unit.

Claim 19 is amended to be directed to a bit-stream representing a multi-media object in which bit-stream quality information has been added and which is generated and transmitted by a transmitter and subsequently processable to enable

reproduction of the multi-media object on a reproduction unit.

Claim 20 is amended to be directed to a storage medium arranged to receive a bit-stream from the transmitter and being subsequently couplable to the reproduction unit to enable transmission of the bit-stream from the storage medium to the reproduction unit for reproduction thereby.

Accordingly, all of claims 1, 10, 12, 19 and 20 now recite at least one structural element.

In view of the amendments to claims 1, 10, 12, 19 and 20, it is respectfully submitted that the Examiner's rejection of claims 1-8, 10, 12, 19 and 20 under 35 USC 101 as being directed to non-statutory subject matter has been overcome and should be withdrawn.

PRIOR ART REJECTIONS

In the Office Action, claims 1-5, 7, 10, 13, 14 and 19 are rejected under 35 USC 102(e) as being anticipated by USP 6,493,387 (Shin et al.). Claims 6, 9, 11, 12, 15-17 and 18 are rejected under 35 USC 103(a) as being unpatentable over Shin et al. in view of USP 6,658,057 (Chen et al.). Claim 8 is rejected under 35 USC 103(a) as being unpatentable over Shin et al., and further in view of USP 5,809,139 (Girod et al.). Claim 20 is rejected under 35 USC 103(a) as being unpatentable over Shin et al., and further in view of USP 6,148,288 (Park et al.).

In response, independent claims 1, 9, 10, 11, 12, 13, 15, 17 and 19 are amended to clarify the invention.

Specifically, claim 1 is now directed to a method of coding a multi-media object which includes coding the object to obtain a bit-stream having multiple coded parts, each coded part including a header and a data part, generating quality information which indicates a quality of the object when the bit-stream is truncated during decoding thereof in relation to the data parts of the coded parts of the bit-stream, and adding the quality information to the headers of the coded parts of the bit-stream such that the quality information is situated throughout the bit-stream. Claim 10 is directed to a method of transmitting at least one multi-media object including the above steps and further transmitting the bit-stream. Claim 13 is directed to a device for coding a multi-media object including means for performing the above steps.

Claim 9 is directed to a method of controlling at least one bit-stream which includes receiving the at least one bit-stream, extracting the quality information from headers of coded parts of the bit-stream, transcoding or truncating the at least one bit-stream in the case a desired combination of bit-rate and quality of the at least one bit-stream differs from a current combination of bit-rate and quality of the at least one received bit-stream, providing the at least one bit-stream at the desired

combination of bit-rate and quality, and processing the at least one bit-stream in consideration of the quality information obtained from the header of one or more coded parts of the bit-stream near the truncation point. Claim 15 is directed to a controller for controlling at least one bit-stream which includes means for performing the above steps.

Claim 11 is directed to a method of receiving at least one bit-stream which includes extracting the quality information from headers of coded parts of the bit-stream, transcoding or truncating the at least one bit-stream in the case a desired combination of bit-rate and quality of the at least one bit-stream differs from a current combination of bit-rate and quality of the at least one received bit-stream, providing the at least one bit-stream at the desired combination of bit-rate and quality, decoding the at least one bit-stream at the desired combination of bit-rate and quality, and processing the at least one bit-stream in consideration of the quality information obtained from the header of one or more coded parts of the bit-stream near the truncation point.

Claim 12 is directed to a method of receiving at least one bit-stream which includes extracting the quality information from the headers of the coded parts of the bit-stream, decoding the bit-stream to obtain a decoded multi-media object, and processing the multi-media object in dependence on the extracted quality

information obtained from the header of one or more coded parts of the bit-stream whereby the processed multi-media object is reproducable by the reproduction unit. Claim 17 is directed to a receiver for receiving at least one bit-stream which includes means for performing the above steps.

Claim 19 is directed to a bit-stream having multiple coded parts generated and transmitted by a transmitter and subsequently processable to enable reproduction of the multi-media object by a reproduction unit. Each coded part has a header and a data part. The quality information indicates a quality of the object when the bit-stream is truncated during decoding thereof in relation to the data parts of the coded parts of the bit-stream. The quality information is present in the header of coded parts of the bit-stream such that the quality information is situated throughout the bit-stream.

The prior art cited by the Examiner does not disclose, teach or suggest all of the features now set forth in the independent claims.

In particular, Shin et al. does not disclose, teach or suggest generating or providing a bit-stream having quality information in the header of coded parts of the bit-stream as now set forth in the claims.

In Shin et al., a base layer is encoded into a base layer bit-stream BL and a plurality of bit-streams BSL(0), BSL(1),...

As each bit-stream BSL(0), BSL(1) is added to the base layer during decoding, the picture quality of images reproduced from the bit-streams gradually increases. Decoding is terminated when picture quality is deemed adequate. Shin et al. does not mention incorporating quality information, such as the signal-to-noise ratio, into the coded parts of the bit-stream and more specifically, into the headers of the coded parts.

Chen et al. describes inserting a translucent logo into a bit-stream. The logo is added to an image to be encoded prior to encoding thereof so that a bit-stream is generated which, when decoded, will contain the image and the logo. Chen et al. does not mention providing headers of coded parts of a bit-stream with quality information to enable the bit-stream to be decoded, and truncated when desired, in consideration of the quality information contained in the headers.

Accordingly, Shin et al. and Chen et al. do not disclose generating quality information which indicates a quality of the object when the bit-stream is truncated during decoding thereof and adding or including this quality information in headers of the coded parts of the bit-stream.

In view of the foregoing, independent claims 1, 10, 13 and 19 are patentable over Shin et al. under 35 USC §102 as well as 35 USC 103. Further, in view of the foregoing, independent

claims 9, 11, 12, 15 and 17 are patentable over Shin et al. in combination with Chen et al. under 35 USC 103.

Claims 2-8, 14, 16, 18 and 20 are either directly or indirectly dependent on claim 1, claim 13, claim 15 or claim 19 and are patentable over the references of record in view of their dependence on claim 1, claim 13, claim 15 or claim 19 and because the references of record do not disclose, teach or suggest each of the limitations set forth in claims 2-8, 14, 16, 18 and 20.

In view of the foregoing, it is respectfully submitted that the Examiner's rejections of claims 1-20 under 35 USC 102(b) and 35 USC 103(a) have been overcome and should be withdrawn.

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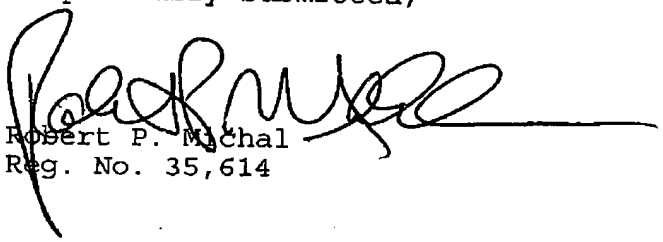
If the Examiner disagrees with any of the foregoing, the Examiner is respectfully requested to point out where there is support for a contrary view.

Entry of the amendment, allowance of the claims, and the passing of the application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,



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